

## SYSTEM AND METHOD FOR DETECTING AND REPORTING FABRICATION DEFECTS USING A MULTI-VARIANT IMAGE ANALYSIS

### Abstract of the Disclosure:

An inspection process and an inspection system (600) that utilize a plurality of residual defect signals 252(1), 252(2), . . . 252(n) to identify and report defects of interest in a copy (116) of a standard (112). The process includes performing a multi-variant defect extraction method (200) that includes applying a number n of pre-determined transforms to both a data file (232) containing the standard and an image file (204) containing the copy of the standard so as to create a plurality of conditioned data files (244(1), 244(2), . . . 244(n)) and a plurality of conditioned image files (216(1), 216(2), . . . 216(n)). The plurality of residual defect signals are extracted from these conditioned files. A defect analysis and reporting method (500) utilizes the residual defect signals to report defects contained in two or more of the residual defect signals.

BTV.261293.3